

Work Order ID 76508

76508

Page 1

November 16, 2011 7:56:43 AM

Item ID: D3428-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Placard

Stop

NS2

Start Date: 11/16/11 Start Qty: 40.00

40

Cust Item ID:

Required Date: 11/18/11 Req'd Qty: 40.00

40

Customer:

Reference:

Approvals: Process Plan: *CD*

Date: 11/11/11 Tooling:

Date:

Run Start

NR1

QC:

Date: SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3428	Rev A

100 0.00

100 PURCHASING

Purchasing

Memo

0.00

Purchasing

Issue P/O: *15469*

Manufacture as per Dwg D3428 using 3M 7mil masking film #8522CP or Avery
IPM #2031

Possible Supplier: Studio Lettrage
Material release note is required

11/11/14
(40)

110 0.00

110 Packaging

Memo

0.00

Packaging

Ensure material release note is attached

11/11/14
(40)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 76508

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76508

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Item ID: D3428-1

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Placard

Stop

NS2

Start Date: 11/16/11 Start Qty: 40.00

40

Cust Item ID:

Required Date: 11/18/11 Req'd Qty: 40.00

40

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

QC6- Inspect dimensions to drawing

0.00

Sululz5

0.00

0.00

center

x40

120

QC

Quality Control

130

Identify as per dwg & Stock Location: 053

0.00

130

Packaging

Memo

0.00

Packaging

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Quality Control

0.00

Picklist Print

November 16, 2011 7:56:42 AM

Page 1

Work Order ID: 76508

Parent Item: D3428-1

Parent Item Name: Placard

Start Date: 11/16/11

Required Date: 11/18/11

Start Qty: 40.00

Required Qty: 40.00

Comments: IPP: A05.08.10New issueKJ/JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3428-1P Placard		Purchased		No		110	Each	0.0000	1	40			

Placard (40)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

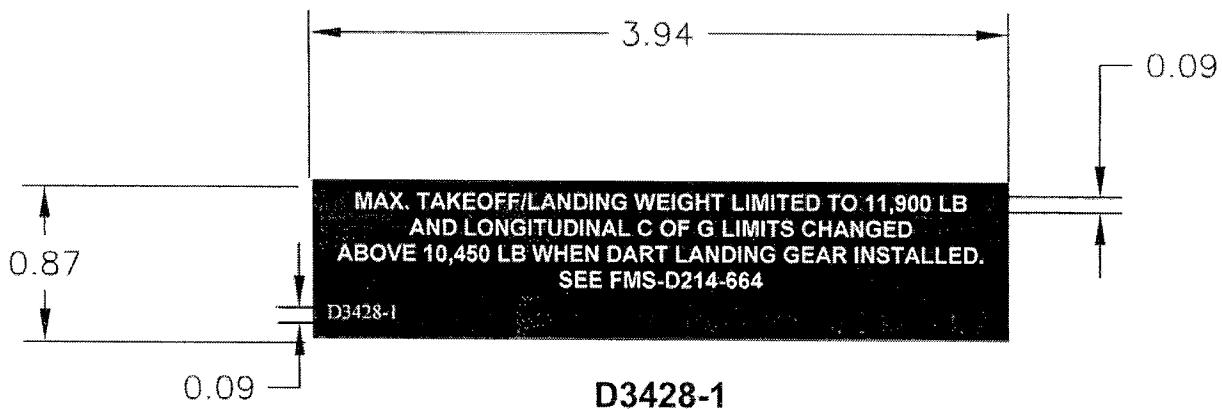
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



1 COPY ISSUED
03/07/07

DESIGN PH	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>PH</i>	APPROVED <i>PH</i>	DRAWING NO. D3428	REV. A SHEET 1 OF 1
DATE 05.06.07	TITLE PLACARD		SCALE 1:1
A	05.06.07	NEW ISSUE	



RELEASED
05.06.07

D3428-1



CL1111116

W10176508

- 1) MATERIAL: WHITE LETTERS ON BLACK ADHESIVE BACK
MANUFACTURED FROM 3M 7 MIL MASKING FILM #8522CP
OR AVERY IPM #2031
- 2) ALL DIMENSIONS ARE IN INCHES
- 3) TOLERANCES PER DART QSI 018 UNLESS OTHERWISE NOTED.



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO15469

Purchase Order Date 11/16/2011
PO Print Date 11/17/2011

Page Number 1 of 1

Order From : VC-STU001

STUDIO DE LETTRAGE 2001
210 MAIN WEST
HAWKESBURY, ON K6A 2H6
CA

Buyer	Brigitte Golden
Requisition Nbr	
Tax Resale Nbr	10127-2607
Terms	Net 30
Currency	CAD
FOB	Destination-Collect

Ship To : DART AEROSPACE LTD 1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Line Nbr	Reference Revision ID	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
		Vendor Part Number					
1	D3428-1P	Placard	11/18/2011 Yes	40.00 Each	Yours ppd	\$2.5000	\$100.00

Special Inst: As per DWG: D3428 Rev: A
B76508
Using 3M 7mil masking film #8522CP or
Avery IPM #2031

2 D4411-1P Placard 11/18/2011 5.00 Yours ppd \$5.0000 \$25.00
Yes Each

Special Inst: As per DWG: D4411 Rev: A
B76528

3	D4411-7P	Placard	11/18/2011	5.00	Yours ppd	\$5.0000	\$25.00
			No	Each			

Special Inst: Same as above

PO Total: **\$150.00**

No substitution or deviation without consent.
Certificate of Conformity or Material Certification required when applicable

Change Nbr: 3

Change Date: 11/17/2011

Studio de Lettrage

210 Main Street W
Hawkesbury, Ontario K6A 2H6

INVOICE

Invoice No.: 16845
Date: 11/25/2011
Ship Date:
Page: 1
Re: Order No. 12013

Sold to:

Dart Aerospace Ltd
1270 Aberdeen
Hawkesbury, Ontario
K6A 1K7

Ship to:

Dart Aerospace | td

Hawkesbury, Ontario

Business No.: 82500 Z651 RT0001



Product & Instruction Bulletin 8522

Release I, Effective September 2008

See Bulletin Change Summary and end of Bulletin

This Bulletin now includes Instruction Bulletin 423

Scotchcal™ Changeable Opaque Imaging Media

8522

For Thermal Inkjet Printing

Product Description

This durable, 7 mil, opaque, changeable film is optimized for use with selected thermal inkjet printers and inks. Ink dries quickly on the film. When overlaminated, it is warranted for medium term, outdoor weatherable graphics, and long term indoor graphics.

Recommended Types of Graphics and End Uses

When constructed and used as described in this Bulletin, these types of graphics and end uses may be warranted by the 3M™ MCS™ Warranty. Please read the entire Bulletin for details.

- First surface images (the image is on top of the film) for opaque posters and signs, including:
 - Graphics for vans, personal vehicles, trucks and buses
 - Novelty posters
 - Retail and point-of-purchase displays
 - Information graphics such as maps and directories
 - Entertainment promotions in museums, zoos, parks, theatres, sports venues
 - Education and presentation graphics
 - Legal and courtroom exhibits
- For flat or simple curved surfaces, with or without rivets, used in vertical ($\pm 10^\circ$) applications

Limitations of End Uses

Unsuitable End Uses for This Product

3M specifically does not recommend or warrant the following uses, but please contact us to discuss your needs or recommend other products.

- Not for electronically cut individual letters and numbers
- Fleet applications in areas that use salt for winter road maintenance
- Application to non-warranted substrates, including wallboard
- Applications subjected to gasoline vapors or spills
- Application to corrugated or highly irregular surfaces or sharply raised areas
- Graphics applied to stainless steel, including stainless steel vehicles
- On flat surfaces with rivets, tenting of 4 to 10 mm around rivets may be expected; rivets may be cut around to eliminate tenting.
- Graphics made for automotive Original Equipment Manufacturers (OEM); contact 3M Automotive Division at 1-800-328-1684 for alternatives.

About Water-Based Inkjet Technology

Standard inkjet technology is water based. Water-based chemistry is susceptible to the extremes of heat and humidity. This is a factor in most product constructions on the market. Read the Fabrication, Shelf Life and Storage sections in this Bulletin. Staying in the middle of these ranges always provides optimum performance.

Compatible Products

3M Graphic Materials

For complete details about graphic construction options, recommended uses and durability, refer to the Product Bulletin for the base film or substrate (media) you are using. See **3M Related Literature** at the end of this Bulletin.

This Bulletin provides details about the base film and construction options and warranty. Additional specific information about compatible products can be found in the Product and Instruction Bulletins listed in **3M Related Literature** at the end of this bulletin.

3M Graphic Materials

For complete details about graphic construction options, recommended uses and durability, refer to the Product Bulletin for the base film or substrate (media) you are using. See **3M Related Literature** at the end of this Bulletin.

Film

- 3M™ Scotchcal™ Opaque Imaging Media 8522

Overlaminate

- 3M™ Scotchcal™ Luster Overlaminate 8519
- 3M™ Scotchcal™ Matte Overlaminate 8520

Printers and Inks

HP Designjet Printers

- 2500CP and 2000CP
- 2800CP and 3800CP
- 3500CP and 3000CP
- HP Designjet 5000 and 5500
- Z6100

HP Inks

- Designjet CP Ink System UV (pigment-based)
- Designjet CP Inkjet System (imaging ink)
- HP 91 Vivera Ink System

Epson Printers

- Stylus Pro 9500
- Stylus Pro 10000 printer
- Stylus Pro 10600 printer

Epson Inks

- Archival Inks

Characteristics

These are typical values for unprocessed product; processing may change the values. Contact your 3M representative for a custom specification.

Characteristic	Description
Media	7 mil, white, opaque graphic film
Liner	Low-slippage, lay flat paper
Adhesive	Changeable, pressure sensitive
Thickness	Media with adhesive: 7.5 to 8 mil (nominal)
Warranted application substrates	See next page.
Application surfaces	Flat or simple curved surfaces, with or without rivets, used in vertical ($\pm 10^\circ$) applications (no corrugations)
Application temperature range	28° to 110°F (-2° to 43°C) (air and surface)
Removable	For up to one year; see Warranty Information

Characteristic	Description
Warranted application substrates	<p>Some substrates may "out-gas", resulting in tiny bubbles throughout the surface of the graphic. For maximum performance, be sure the substrate you select is properly cleaned and prepared as recommended by the manufacturer. See Instruction Bulletin 5.1 for additional information.</p> <ul style="list-style-type: none"> • Alodine (anodized aluminum) • Automotive panels (automotive painted steel) • Fruehauf (painted aluminum) • FRP (fiberglass reinforced plywood) • Glass • Imron® (polyurethane-painted metal panel) • Acrylic • Sintra™ board <p>Note: Use on any other substrate is strictly on a graphics manufacturer and customer test and approve basis. Test for both adhesion and removal characteristics. The plasticizer in some banner materials may migrate. This may cause the edge of the graphic to peel or lift off of the banner. For optimum performance, follow the guidelines in the section, Creating A Laminated Overlap, on page 4.</p>

Warranty Information

The warranty given in the Product Bulletin that is current at the time you purchased the film is the one that 3M will honor. **The warranties in the following table(s), given in years, are for finished graphics exposed in a vertical exposure in the United States except the Desert Southwest.** See the warranty sections following this table for additional information.

3M™ MCS™ Warranty Durability for Finished Graphics

Construction (film and overlaminate on warranted substrate)	HP Printers & Inks		Epson Printers & Inks		Removal
	Outdoor	Indoor	Outdoor	Indoor	
8522/8519	3 years	5 years	2 years	5 years	1 year without chemical strippers or tools
8522/8520					

Warranty and Limited Remedy

The following is made in lieu of all other express or implied warranties, including any implied warranty of **merchantability** or fitness for a particular purpose or implied warranty arising out of a course of dealing, custom or usage of trade: all 3M products are warranted to be free of defects in materials and manufacture at the time of shipment and to meet the specifications stated in this Product Bulletin. 3M will replace or refund the price of any 3M materials that do not meet this warranty within the specified time periods. These remedies are exclusive. **In no case shall 3M be liable for any direct, indirect, or consequential damages, including any labor or non-3M materials charges.**

See the Graphics Market Center Warranty Brochure, which gives the terms, additional limitations of the warranty, if any, and limitations of liability.

Shelf Life, Storage and Shipping

Shelf Life	Total shelf life: 1 year (processed, unprocessed or any combination thereof)
Storage Conditions	<ul style="list-style-type: none">• New and partially used rolls. For optimum performance, use the middle of these ranges:<ul style="list-style-type: none">- Original packaging, including plastic wrap to protect from contamination- Use an end plug and tape down the edge to prevent damage if the media is stored upright- Relative humidity of 20% to 80%- Temperature of 33° to 104°F (0° to 40°C)- Away from direct sunlight• Bring the film to print room temperature before using• Do not stack unprotected rolls or lay sharp or heavy objects on them.• Do not lay sharp or heavy objects on unprotected rolls and do not stack them.
Shipping Finished Graphics	Flat, or rolled printed side out on 5 inch (13 cm) or larger core. This helps prevent the liner and, if used, the application tape from popping off.

3M Related Literature

Before starting any job, be sure you have the most recent product and instruction bulletins.

The information in 3M Product and Instruction Bulletins is subject to change. Current Bulletins are available at 3Mgraphics.com. The techniques described in these Bulletins are required when applying a 3M warranted graphic, but are also practical recommendations when using promotional materials for non-warranted graphics. Additional Bulletins may be needed as indicated in the 3M Related Literature section of other 3M components you use.

Bulletin types: PB = Product Bulletin; PB-IB = Product & Instruction Bulletin; IB = Instruction Bulletin

Subject	Type	Bulletin No.
3M™ Scotchcal™ Luster Overlaminate 8519 and 8520	PB	8519/8520
Application, substrate selection, preparation and substrate-specific application techniques	IB	5.1
Application, general procedures for indoor and outdoor dry applications	IB	5.5
Storage, handling, maintenance, removal	IB	6.5
3M Graphics Center Warranty Brochure	go to www.3Mgraphics.com , Warranties	

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Bulletin Change Summary

HP Designjet printer Z6100 and HP 91 Vivera ink systems have been added to the list of compatible printers and inks.

Instruction Bulletin 4.23 has been incorporated into this Bulletin, which is now called Product & Instruction Bulletin 8522.

3M™ Scotchcal™ Instant Dry Translucent Imaging Media 8544, which was shown in Instruction Bulletin 4.23, is obsolete. A backlit graphic option is no longer available.



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Technical Info: 1-800-328-3908
Fax 1-651-736-4233

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Canada N6A 4T1
1-800-265-1840
Fax 519-452-6245

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Col. Santa Fe, Del. Alvaro Obregón
México, D.F. 01210
52-55-52-70-04-00
Fax 52-55-52-70-22-77

3M Puerto Rico, Inc.
Puerto Rico Industrial Park
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787-620-3000
Fax 787-750-3035